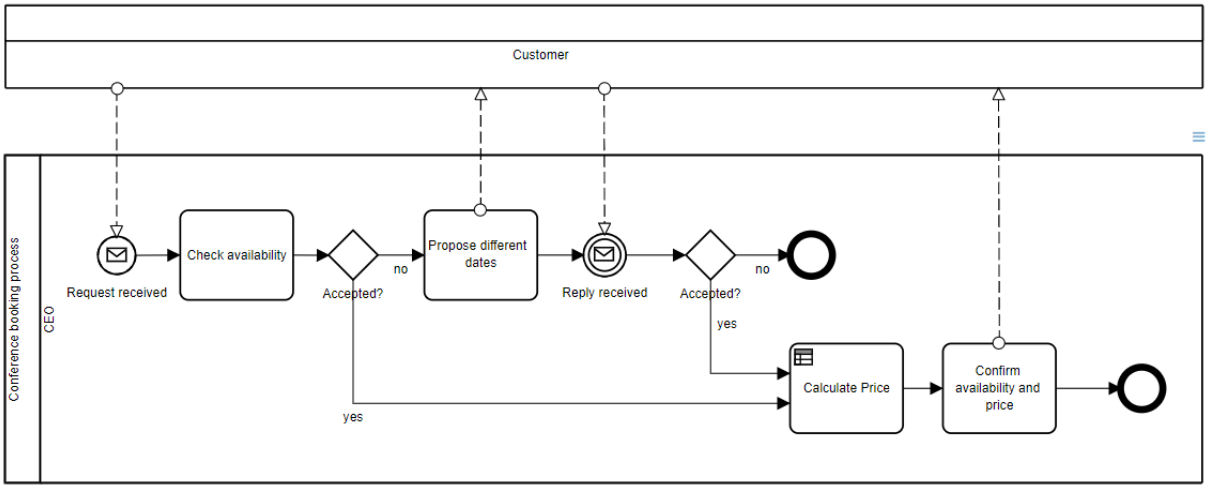
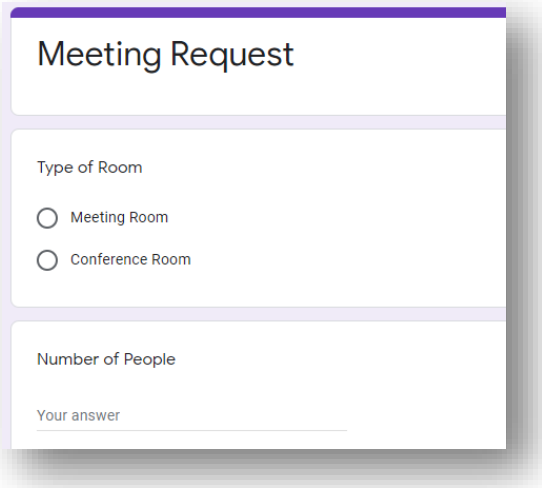
Exercise: DMN Modeling

This is a booking process for rooms. The process contains a task for calculating the price of the booking. This task is a decision task.



Exercise 1

The price is calculated based on the data given in the meeting request form:



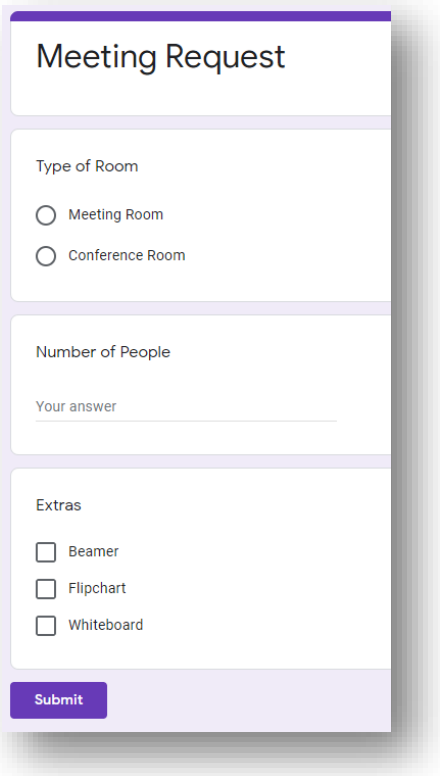
Decision criteria for the price are:

- The price for a meeting room is 500
- If the requested room is a conference room and the number of people is less than or equal to 30, then the price is 800
- If the requested room is a conference room and the number of people is greater than 30, then the price is 1200

Model the decision in DMN.

Exercise 2

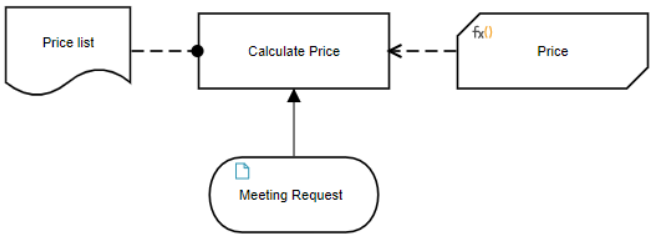
Guests can book beamer {€ 60), flipchart (€ 30) and whiteboard (€40) for the rooms.



Extend the decision table such that it calculates the price for the room and the additional extras.

Solution Exercise 1

Requirements Diagram



Decision Table

	inputs		outputs	annotations
U	New Input	Number of People	Price	Description
	Text *"Meeting Room", "Conference Room"*	*Number*	*Number*	
1	"Meeting Room"	-	500	
2	"Conference Room"	<=30	800	
3	"Conference Room"	>30	1200	

The following tables are **not** appropriate:

In the table the type for Number of People is a text enumeration, while the input data is a number:

U	New Input	Number of People	Price
	Text *"Meeting Room", "Conference Room"*	*tNumberofPeople* *<=30, >30*	*Number*
1	"Meeting Room"	-	500
2	"Conference Room"	<=30	800
3	"Conference Room"	>30	1200

In this table the type of Number of People is Boolean, while the input data is a number. This solution would require a second decision to map the number to the the values “true” or “false”

U	New Input	Number of People	Price
	Text *"Meeting Room", "Conference Room"*	*Boolean* *>30*	*Number*
1	"Meeting Room"	-	500
2	"Conference Room"	true	800
3	"Conference Room"	false	1200

Solution Exercise 2

This is the decision table. Be aware that the hit policy is Sum – Collect. It applies all rules with satisfied conditions and sums up the output of these rules.

C+	Type of Room	Number of People	Extras	Price
	Text *"Conference Room", "Meeting Room"*	*Number*	*Text* *"Beamer", "Flipchart", "Whiteboard"*	*Number*
1	"Conference Room"	<=30	-	800
2	"Conference Room"	>30	-	1200
3	"Meeting Room"	-	-	500
4	-	-	"Beamer"	60
5	-	-	"Flipchart"	30
6	-	-	"Whiteboard"	40